



GLOBAL
RESEARCH
ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

Country report : Australia

Lee Nelson,

Acting Assistant Secretary, Department of Agriculture, Water and the Environment



Presentation to IRG Annual Meeting
24-25 June 2021

Specific contributions to IRG and GRA

- Andrew Campbell, CEO Australian Centre for International Agricultural Research (ACIAR) represents the GRA as its Council Chair.
- Richard Eckard, Professor of Sustainable Agriculture at the University of Melbourne is a research leader on the Inventories and NDC Network
- Lee Nelson, acting Secretary, Biodiversity Conservation Division, Department of Agriculture, Water and the Environment represents the GRA as a co-Chair of the Integrative Research Group.

Projects, initiatives and contributions to IRG's topics

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GRA Council Chair

As well as supporting GRA objectives, Australia has a number of specific objectives during its year as GRA Council Chair:

- encourage greater engagement of Pacific Island countries within the activities of GRA members,
- encourage and support participation of researchers in our region on GRA research activities,
- support research into synergies or co-benefits between mitigation and adaptation, and
- assist countries in our region improve national inventory systems and NDC capability

Projects

Funding support for the MAC-B modelling approach - Australia has developed a proposal for sustainable rice intensification in Bangladesh working with AgMIP. Once the project contract is agreed it will be advertised through the GRA – to encourage others to invest.

Queensland University of Technology submission for the development of soil carbon methodologies utilising flux tower technology. Interest in GRA partner co-funding if submission successful

ACIAR, University of Melbourne, Queensland University of Technology are collaborating with the New Zealand Ministry of Primary Industries, United States Environmental Protection Agency and GHG Management Institute, in their projects in Fiji and Vietnam on National Inventory Systems

Opportunities, future actions and funding

Release of the Technology Investment Roadmap

- Includes aim to reduce emissions through investments in soil carbon (notably, the goal to reduce the cost of measurement to less than \$3 per hectare per year) and investment in new agricultural feed technologies, and a high integrity carbon offset scheme in the Indo-Pacific under a technology co-investment facility.
- support a National Soil Carbon Innovation Challenge as well as trailing new agricultural feed technologies that reduce emissions from livestock.

National Soils Strategy

- Australia's new National Soils Strategy will support the ongoing management, research, development and protection of agricultural soils

National Soils Advocate

- A National Soils Advocate appointed to providing leadership and support for conserving and improving the condition of soils and address global challenges, including food security, sustainability and climate change.
- Promote Australia's expertise and capabilities in soil science and research in land and soil management globally.

Drought Resilience Research and Adoption

Drought Research and Adoption program will help farmers build drought resilience through investment into collaborative research, development, extension, adoption and commercialisation activities.

National Climate Service

\$210 million Australian Climate Service to improve climate predictions and assist industry to adapt to climate change.

Carbon + Biodiversity Pilot

Carbon + Biodiversity Pilot is trialling arrangements to reward farmers for improving on-farm biodiversity together with carbon projects under Australia's Emissions Reduction Fund (ERF).

The Carbon + Biodiversity Pilot is part of the wider \$34 million commitment of the Australian Government to biodiversity stewardship on farms. Developed with the Australian National University (ANU)

<https://www.aciar.gov.au>

<https://www.industry.gov.au/data-and-publications/technology-investment-roadmap-first-low-emissions-technology-statement-2020>

<https://www.agriculture.gov.au/ag-farm-food/natural-resources/soils/national-soil-strategy>

<https://pmc.gov.au/domestic-policy/national-soils-advocate>

<https://www.agriculture.gov.au/ag-farm-food/drought/future-drought-fund/research-adoption-program>

<https://minister.awe.gov.au/ley/media-releases/new-national-climate-service-australia>

<https://www.agriculture.gov.au/ag-farm-food/natural-resources/landcare/sustaining-future-australian-farming/carbon-biodiversity-pilot>

<https://www.gracouncilmeeting2021.org/>